the invention. Thus, while we have disclosed means to regulate the voltage applied to the electrodes, in lieu thereof, use may be made of means to regulate the current flowing through the tumor to optimize the yield of cytotoxic agents having the greatest efficacy.

WHAT WE CLAIM IS:

1. Apparatus for generating in situ in a tissue a cytotoxic agent which destroys the tissue, the apparatus comprising:

A. at least two electrodes adapted to be attached to the tissue;

B. means to apply a voltage across the electrodes to cause a current to flow through the tissue which brings about an electrochemical reaction yielding said cytotoxic agent.

2. Apparatus as set forth in claim 1 further including means to deliver to the tissue a reagent which when current flows through the tissue reacts with the material of one of the electrodes to produce said agent.

3. Apparatus as set forth in claim 2 in which said reagent is an electrolyte.

4. Apparatus as set forth in claim 3 in which said electrode is made of platinum and said electrolyte is ammonium dichloride.

5. Apparatus as set forth in claim 2 in which one electrode is hollow to form a pipe for delivering said reagent to said tissue.

6. Apparatus as set forth in claim 2 further including a sensor to detect the cytotoxic agent in said tissue and to produce a signal whose magnitude depends on the potency of the agent, and means responsive to said signal to control the current to optimize the efficacy of the agent.

7. Apparatus as set forth in claim 2 in which one of the electrodes is formed from a metal in the platinum class.

8. Apparatus as set forth in claim 2 in which one of the electrodes are formed from titanium, and said reagent is reactive therewith.

9. Apparatus as set forth in claim 2 further including means to deliver to the tissue a photosensitive electrolyte, and optical means to illuminate the electrolyte.

10. A kit for treating specified tissue in a patient, said apparatus comprising:

A. a working electrode and a counterelectrode, each electrode adapted to be positioned in said patient within or near said tissue;

B. means for applying a voltage effective to induce a current between the electrodes;

C. means for regulating the voltage across the electrodes;

D. a precursor of a compound having cytotoxic activity against the tissue; and

E. means for introducing said precursor into said patient into or near said tissue, said precursor being activated by (i) said current, (ii) reaction with one of said electrodes, or (iii) illumination from a light source.

11. The kit of claim 10, wherein at least one of said electrodes is adapted to receive a fiber optic for delivering light into or near said tissue effective to activate said precursor.

12. The kit of claim 10, wherein one of said electrodes is hollow and porous and said precursor is introduced thereinto.

13. The kit of claim 10, wherein said voltage is regulated in a pulsed manner effective to deliver pulsed dosages of said precursor.

14. The kit of claim 10, wherein said voltage is regulated in a pulsed manner effective to activate said precursor in pulsed dosages.

15. A method for treating a tissue in a patient, comprising:

A. providing an *in vivo* current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having cytotoxic activity against said tissue; and

C. activating said precursor to be cytotoxic.

16. The method of claim 15, wherein said precursor is activated by said current.

17. The method of claim 15, wherein said current is provided by electrodes and said precursor is activated by reaction with at least one of said electrodes.

18. The method of claim 15, wherein said precursor is activated by light.

19. The method of claim 15, comprising a plurality of different precursor compounds.

20. The method of claim 15, wherein said activating is cyclical.

21. The method of claim 15, wherein the amount of precursor activated is monitored in vivo.

22. The method of claim 21, wherein the activation of the precursor is regulated as a function of the monitored amount of activated compound.

23. The method of claim 17, wherein said reaction is catalytic.

24. The method of claim 17, wherein said electrode is consumed by reaction with said precursor.

25. The method of claim 15, wherein said precursor comprises a metal.

26. The method of claim 25, wherein said metal is selected from the group consisting of Pt, Pd, Ru, Rh, Os, Ir, and mixtures thereof.

27. The method of claim 24, wherein said activated compound comprises a metal.

28. The method of claim 27, wherein said metal is selected from the group consisting of Pt, Pd, Ru, Rh, Os, Ir, and mixtures thereof.

29. The method of claim 15, wherein the patient is a human.

30. The method of claim 15, wherein the patient is a non-human.

31. The method of claim 19, wherein at least two compounds are administered simultaneously.

32. The method of claim 31, wherein said compounds are activated simultaneously.

33. The method of claim 31, wherein said compounds are activated serially.

34. The method of claim 19, wherein at least two compounds are administered serially.

35. Apparatus as set forth in claim 1, wherein the tissue is tumorous.

36. A. method as set forth in claim 15, wherein the tissue is tumorous.